HEAT CONTROLLER, INC.

REMOTE CONTROLLER OWNER'S MANUAL

SMA/SMH24SC
Single Zone Mini-Splits

CONTENTS

Remote Controller Specifications

Model*	R51D/BGE, R51K/BGCE, R51K1/BGE, R51K1/BGCE
Rated Voltage	3.0V
Lowest Voltage of CPU Emitting Signal	2.0V
Reaching Distance	26'3" (8m)
Environment Temperature Range	-41°F~140°F (-5°C~60°C)

***NOTE:**   **Temperature setting display:**

Celsius scale (°C): R51K/BGE, R51K/BGCE;

Fahrenheit scale (°F): R51K1/BGE, R51K1/BGCE;
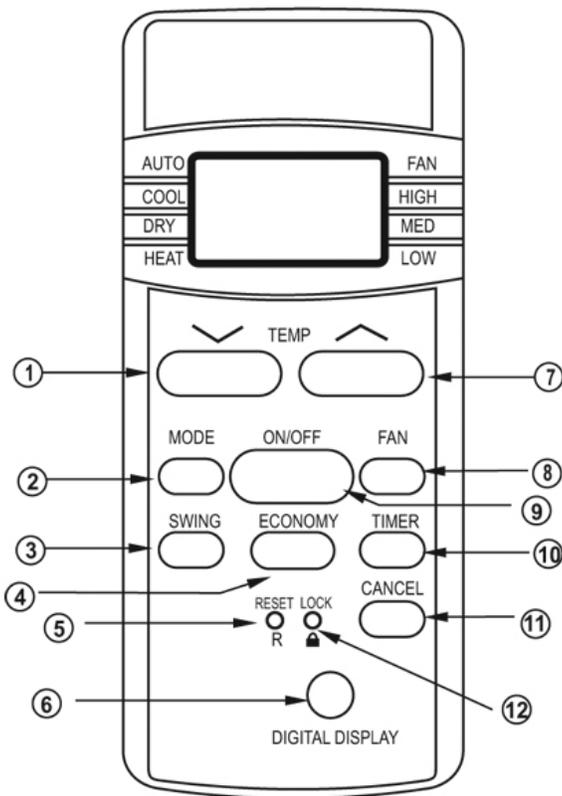
FIG. 1

Features

1. Operating Mode: COOL, HEAT (for heat pump models only), DRY, FAN and AUTO

2. 24-hour timer setting function

3. Indoor set temperature range: 62°F~88°F (17°C~30°C)

4. LCD (Liquid Crystal Display) of all functions

5. Night light function

Remote Controller Display Indicators
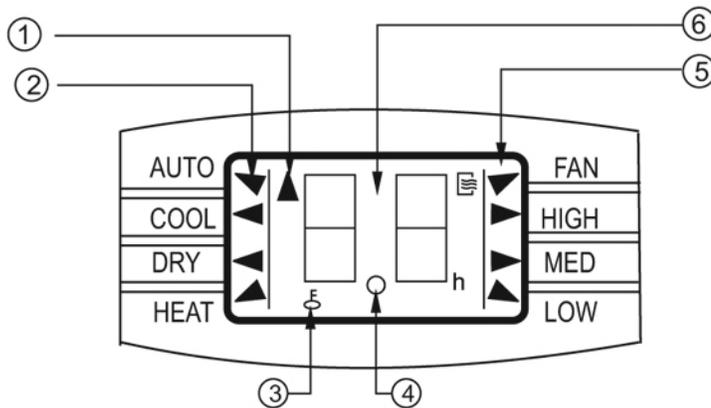
Fig. 2

① **TRANSMISSION Indicator:** This indicator lights up when remote controller transmits signals to indoor unit.

② **MODE Display:** Shows the current operation mode -- AUTO, COOL, DRY and HEAT. (HEAT only available for heat pump model.)

③ **LOCK (heat pump only models)**: This is displayed by pushing the LOCK button. Push the LOCK button again to clear display. LOCK prevents the current settings from being changed.

④ **TIMER Display**: This display area shows the settings of TIMER. If the starting time is set, it will display TIMER ON. If the stop time is set, it will display TIMER OFF. If both operations are set, it will show TIMER ON-OFF which indicates both of the starting time and off timers have been set.

⑤ **FAN Display:** When the FAN button is pushed, this signal indicator lights.

⑥ **Digital Display Area:** This area will show the temperature and, if in the TIMER mode, will show the ON and OFF settings of the TIMER.

Operation Instructions

1. Install/Replace Batteries

The Remote Controller uses two AAA alkaline dry batteries(R03/Ir03X2).

A. To install batteries, slide back the cover of the battery compartment and install the batteries according to the directions (+and -) shown on the Remote Controller.

B. To replace the old batteries , use the same method as mentioned above.

⚠ NOTE

- *When replacing batteries, do not use old batteries or different types. This may cause the remote controller to malfunction.*
- *If you do not use the remote controller for an extended period of time, remove the batteries. Otherwise battery leakage may damage the remote controller.*
- *The average battery life under normal use is about 6 months.*
- *Replace the batteries when there is no beep from the indoor unit of if the Transmission Indicator light fails to appear when buttons are pressed on the remote controller.*

2. Automatic Operation

When the air conditioner is ready for use, switch on the power, the OPERATION indicator lamp on the display panel of the indoor unit starts flashing.

A. Use the MODE select button to select AUTO.

B. Push the TEMP button to set the desired room temperature. The most comfortable temperature settings are between 70°F-82°F (21°C-28°C).

C. Push the ON/OFF button to start the air conditioner. The OPE-RATION lamp on the display panel of the indoor unit lights. The operating mode of AUTO FAN SPEED is automatically set and there are no indicators shown on the display panel of the remote controller.

D. Push the ON/OFF button again to stop the unit's auto operation.

⚠ NOTE

- *In the AUTO mode, the air conditioner can logically choose COOL, FAN, HEAT and DRY modes by sensing the difference between the actual ambient room temperature and the set temperature on the remote controller.*

- *If AUTO mode is not desirable, the desired mode can be selected manually.*

3. COOL, HEAT and FAN ONLY Operation

    A. If the AUTO mode is not desirable, manually override the settings by using COOL, DRY, HEAT (heat pump models only), or FAN ONLY modes.

    B. Press the TEMP button to set the desired room temperature from 70°F (21°C) to 82°F (28°C).

    C. Press the FAN SPEED to select the FAN mode of AUTO, HIGH, MED or LOW.

    D. Press the ON/OFF button. The operation lamp lights and the air conditioner starts to operate per your settings. Push the ON/OFF button again to stop the operation.

NOTE

• *The FAN ONLY mode cannot be used to control the temperature. In FAN ONLY mode, the fan operates to create a breeze-like affect without cooling or heating the room. To cool or heat the room, change the mode of operation to COOL or HEAT.*

4. DRY OPERATION

    A. Press the MODE button to select DRY to dehumidify.

    B. Press the TEMP button to set the desired temperature from 70°F (21°C) to 82°F (28°C).

    C. Press the ON/OFF button. The operation lamp lights and the air conditioner starts to operate per your settings. Push the ON/OFF button again to stop the operation.

NOTE

• *Due to the difference of the set temperature of the unit and the actual indoor temperature when in DRY mode, the air conditioner will automatically operate frequently without actually being in COOL and FAN mode.*

5. TIMER OPERATION

PUSH TIMER button to set the on and off times of the unit.

    A. To set the starting time.

      1. Please press the CANCEL button to cancel any previous settings.

      2. Press the TIMER button. The remote controller will show the TIMER and the symbol "h" is shown on the display panel. The control is now ready to reset the TIMER ON to start the operation.

      3. Press the TEMP button (▲ or ▼) to set the desired unit START time.

      4. After setting the TIMER there will be a one-half second delay before the remote controller transmits the signal to the Air Conditioner. Then, after approximately another 2 seconds, the set temperature will re-appear on the digital display.

6. Setting the timer to stop the unit's operation

A. Please press the CANCEL button to cancel any former settings.

B. Push the TIMER button and the remote controller will show the last set time for the START operation and the symbol "h" will be shown on the display panel. You are now ready to re-adjust the TIMER OFF.

C. Push the TEMP button to cancel the TIMER ON setting. The digital area will show "00".

D. Push the TIMER button and the remote controller will show the last set time for the STOP operation and the symbol "h" will be shown on the display panel. You are now ready to reset the time of the STOP unit's operation.

E. Push the TEMP button (⌄ or ⌃) to set the time you want to stop the operation.

F. After setting the TIMER there will be a one-half second delay before the remote controller transmits the signals to the Air Conditioner. Then after approximately another 2 seconds, the set temperature will re-appear on the digital display.

7. Set the STARTING & STOPPING time

A. Please press the CANCEL button to cancel any former settings.

B. Push the TIMER button and the remote controller will show the last set time for START operation and the symbol "h" will be shown on the display panel. You are now ready to readjust the TIMER ON to start the operation.

C. Push the TEMP button (⌄ or ⌃) to set the time you want to start the operation.

D. Push the TIMER button and the remote controller will show the last set time for STOP operation and the symbol "h" will be shown on the display panel. You are now ready to reset the time of the STOP operation.

E. Push the TEMP button (⌄ or ⌃) to set the time you want to stop the operation.

F. After setting the TIMER there will be a one-half second delay before the remote controller transmits the symbol to the Air Conditioner. Then, after approximately another 2 seconds ,the set temperature will re-appear on the digital display.

⚠ NOTE

• Please reset the TIMER after cancelling the former time settings.

• The setting time is relative time. That is the time set is based on a delay from the current time.

⑧ **TEMP Button ▼**: Push the TEMP button to decrease the indoor temperature setting or to adjust the TIMER in a counter-clockwise direction.

⑨ **MODE Select Button**: Each time you push the button, a mode is selected in a sequence that goes from AUTO, COOL, DRY, HEAT and FAN as the following figure indicates:

$$\text{AUTO} \longrightarrow \text{COOL} \longrightarrow \text{DRY} \longrightarrow \text{HEAT}^* \longrightarrow \text{FAN}$$

*NOTE: HEAT feature only for heat pump models.

⑩ **SWING Button**: Press this button to change the louver angle which adjusts the UP/DOWN airflow direction.

⑪ **ECONOMY Button**: Press this button to go into the Energy Saving (Sleep) mode. When this function is operating, the set temp will increase (cooling) or decrease (in heating mode) by 2°F (1°C) per hour for the next two hours, then remain constant for the next 5 hours. This new feature will remain active for 7 hours before it returns to the originally selected temperature.

⑫ **RESET Button**: When the RESET button is pressed, all of the current settings are cancelled and the control will return to the initial settings.

⑬ **DIGITAL DISPLAY Button**: Press this button to clear the digital display in the air conditioner. Press it again to activate it.

⑭ **TEMP Button ▲**: Press this button to increase the indoor temperature settings or to adjust the TIMER in a clockwise direction.

⑮ **FAN Button**: This button is used for setting Fan Speed in the sequence that goes from AUTO, LOW, MED, to HIGH then back to Auto, as the following figure indicates:

$$\text{AUTO} \longrightarrow \text{COOL} \longrightarrow \text{DRY} \longrightarrow \text{HEAT} \longrightarrow \text{FAN}$$

* NOTE: HEAT feature only for heat pump models.

⑯ **ON/OFF Button**: Press this button to start the operation of the unit. Press the button again to stop the operation of the unit.

⑰ **TIMER Button**: This button is used to preset the timer ON (start to operate) and the timer OFF (turn off operation).

⑱ **CANCEL Button**: Press this button to cancel the TIMER settings.

⑲ **LOCK Button**: Press this button to lock all the current settings and prevent settings from being changed accidentally. To release settings, press again.

Warning

- Be sure there are no barriers between the remote controller and the receiver of the indoor unit, otherwise the air conditioner may not receive the signal from the remote.

- Keep the remote controller away from all liquids.

- Keep the indoor receiver out of direct sunlight.

- Keep controller away from other applications that may create an EMI (Electro-Magnetic Interference).